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FUNGI EDIBLE AND POISONOUS

WILLIAM A. MURRILL

An article on this subject prepared by the writer appeared nearly a year ago in the fourth volume of the second edition of "Wood's Reference Handbook of the Medical Sciences." The plan of the article included a general introduction to edible and poisonous mushrooms; a list of edible mushrooms selected by Dr. Peck after nearly fifty years' experience; preparing and cooking mushrooms; descriptions of edible and poisonous species; and a brief glossary containing the technical terms used. In addition to the 23 pages of descriptive matter, 26 species are illustrated with ordinary half-tones and 22 with colored half-tones.

The edible and poisonous species described in this paper are carefully selected with special reference to their economic use or their dangerous properties. A number of species are omitted because they might be confused with poisonous species. Following the scientific description in each instance, are notes calling attention to special characteristics, occurrence, methods of cooking, etc.

No attempt is made to prepare a key to the species, since reliable keys are possible only when all the known plants of a group or of a region are included. The arrangement of the species follows the lines of classification adopted by the best authorities.

LIST OF SPECIES DESCRIBED

Morchella esculenta Pers. Edible
Clavaria flava Schaeff. Edible
Hydnum repandum L. Edible
Hydnum Caput-ursi Fries. Edible
Fistulina hepatica (Huds.) Fries. Edible
Grifola frondosa (Dicks.) S. F. Gray. Edible
Laetiporus speciosus (Batt.) Murrill. Edible
Tylopilus felleus (Bull.) P. Karst. Inedible
Ceriumyces crassus Batt. Edible

- Ceromyces scaber* (Bull.) Murrill. Edible
Ceromyces ferruginatus (Batsch) Murrill. Poisonous
Ceromyces miniato-olivaceus (Frost) Murrill. Poisonous
Suillellus luridus (Schaeff.) Murrill. Poisonous
Rostkovites granulatus (L.) P. Karst. Edible
Strobilomyces strobilaceus (Scop.) Berk. Edible
Chanterel Chantarellus (L.) Murrill. Edible
Chanterel aurantiacus (Wulf.) Fries. Doubtful
Lactaria deliciosa (L.) Fries. Edible
Lactaria lactiflua (L.) Burl. Edible
Lactaria piperata (L.) Pers. Edible
Russula Mariae Peck. Edible
Russula emetica Fries. Poisonous
Russula virescens (Schaeff.) Fries. Edible
Russula foetens Pers. Poisonous
Marasmius oreades (Bolt.) Fries. Edible
Pleurotus sapidus Kalchb. Edible
Clitocybe multiceps Peck. Edible
Clitocybe illudens (Schw.) Sacc. Poisonous
Melanoleuca personata (Fries) Murrill. Edible
Armillaria mellea (Vahl) Quél. Edible
Lepiota procera (Scop.) Quél. Edible
Lepiota americana Peck. Edible
Lepiota naucina (Fries) Quél. Edible
Chlorophyllum Molybdites Massee. Poisonous
Vaginata plumbea (Schaeff.) Murrill. Edible
Vaginata agglutinata (Berk. & Curt.) O. Kuntze. Poisonous
Venenarius phalloides (Fries) Murrill. Deadly poisonous
Venenarius muscarius (L.) Earle. Deadly poisonous
Venenarius cothurnatus (Atk.) Murrill. Poisonous
Venenarius spretus (Peck) Murrill. Poisonous
Venenarius solitarius (Bull.) Murrill. Poisonous
Venenarius rubens (Scop.) Murrill. Edible
Venenarius Caesareus (Scop.) Murrill. Edible
Pleuropus abortivus (Berk. & Curt.) Murrill. Edible
Pluteus cervinus (Schaeff.) Fries. Edible
Paxillus involutus (Batsch) Fries. Edible
Inocybe infida (Peck) Earle. Poisonous
Pholiota candicans (Bull.) Schröt. Edible
Hypholoma appendiculatum (Bull.) Quél. Edible
Hypholoma perplexum (Peck) Sacc. Edible
Agaricus campester L. Edible
Agaricus placomyces Peck. Edible
Agaricus arvensis Schaeff. Edible
Coprinus micaceus (Bull.) Fries. Edible
Coprinus atramentarius (Bull.) Fries. Edible
Coprinus comatus (Muell.) Fries. Edible
Lycoperdon gemmatum Batsch. Edible
Lycoperdon cyathiforme Bosc. Edible

Scleroderma aurantium (L.) Pers. Inedible

Dictyophora duplicata (Bosc) Ed. Fisch. Considered poisonous

PREPARING AND COOKING MUSHROOMS

The following directions are given in this article for preparing and cooking mushrooms:

Reject old specimens or those infected with insects, cut off the stems except in rare cases when they are unusually tender, peel a few kinds that seem to require it, wash quickly in cold water, drain and keep in a cool place until ready to cook. As a rule, mushrooms cannot be kept very long in a fresh condition, and this is particularly true of certain very desirable species. When more are collected than can be used at once, it is best to boil them ten minutes, drain, keep in a cool place, and finish the cooking next day as desired. If allowed to stand in water, the flavor is impaired; also, peeling may remove some of the best flavored parts.

The flavor and digestibility of mushrooms depend very largely on the way they are cooked. Tender varieties should be cooked quickly and served at once; tough varieties require long, slow cooking. When the flavor is good, it should be retained by covering during the cooking process and seasoning in a simple way. When the flavor is poor or when the specimens are slightly bitter or otherwise objectionable in the raw state, they may often be greatly improved by boiling for a short time and throwing the water away, then cooking thoroughly and seasoning well. It is often desirable to mix a few highly flavored specimens with those lacking flavor. Mushrooms are also excellent cooked with meat, poultry, oysters, tomatoes, or sweet peppers, and as a flavoring for soups and sauces.

Detailed directions for cooking mushrooms are given in most of the books. The most practical and successful methods resolve themselves into broiling, baking, and stewing. In the first, which I prefer to all other methods, the mushrooms are cooked thoroughly but as quickly as possible, on both sides over a hot fire; seasoned with pepper, salt, butter, and perhaps small bits of toasted bacon; and served hot on toast. To bake mushrooms, line the pan with toast, add the specimens, season, pour in half a cup of cream, cover closely, and bake rather slowly for fifteen

minutes or more according to quality. In stewing, the mushrooms are boiled in water until thoroughly cooked, then seasoned, thickened, and served on toast. This last method is often used for the tougher or poorer varieties. Certain modifications of the above methods may be suggested later under individual species requiring special treatment.

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